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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,390	10/10/2001	Kenneth S. Kramer	2640/1G822-US1	1277

7590

07/13/2005

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EXAMINER

NGUYEN, VI X

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/975,390

Applicant(s)

KRAMER ET AL.

Examiner

Victor X. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 26, 27 and 29-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's Amendment After Final Action filed 6/8/2005, with respect to claims 1-20 are acknowledged. Therefore, the Final Office Action has been withdrawn. However, upon further consideration, the above noted reference in view of Kuenemund (3,781,717) is still considered to read on the claimed limitations of the claims noted.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20, 22-25 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, it is unclear from the specification and drawings in figures 8a,b how a shunt capacitance of the transducer is determined. Further, applicant fails to disclose **how it is done** by calculating the temperature of the transducer based on the shunt capacitance of the transducer.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kuenemund (3,781,717).

Kuenemun discloses a method step (figures 1, 3-5) having the limitations as recited in the above listed claims, including: a transducer (25), where determining the temperature of the transducer based on the capacitance of the transducer (see col. 2, lines 54-61, col. 5, lines 11-31 and col. 10, lines 32-40), and where providing a warning to a user of the handpiece (18). If one of the temperature of the transducer and a rate of change of the temperature is excessive which would inherently provide a warning to a user of the handpiece. Alternatively, it would have been obvious that If one of the temperature of the transducer and a rate of change of the temperature is excessive which would provide a warning to a user of the handpiece. It would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify Kuenemund by having a warning to a user in order to help improved the safety of the system during surgical procedure.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 15 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenemund (3,781,717).

As to claims 6, 15 and 28 the device as shown in figs. 1, 3-5 can be used to determined temperature of a transducer of an ultrasonic hand piece substantially as recited. Note that the predefined frequency range could be from 34 kHz to 44 kHz or 34.5 kHz to 44.5 kHz. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to have a range as claimed for this device is only a design choice and a minor modification of Kuenemund device would provide a frequency range as recited in the claims.

Claim 11 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Kuenemund in view of Benndorf et al (4,689,515).

Kuenemund teaches all limitations substantially as claimed except the capacitance frequency is stored in memory. Benndorf et al teach the capacitance frequency is stored in memory (figs. 1-2, see col. 1, lines 29-44, col. 2, lines 34-67 and col. 3, lines 1-11) in order to determine proper transducer temperature within the handpiece. It would have been obvious to one having ordinary skill in the art at the time the invention to modify Kuenemund by adding the capacitance frequency is stored in memory in order to determine proper transducer temperature within the handpiece.

***Allowable Subject Matter***

5. Claims 26-27 and 29-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record, alone or in combination, discloses all of the limitations of claim 26 including, discarding a maximum and a minimum calculated shunt capacitance value to obtain a residual group of shunt capacitances, and where averaging the residual group of shunt capacitances to obtain a final shunt capacitance value of the hand piece.

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As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Response to Arguments***

6. Applicant's arguments filed 6/8/2005 have been fully considered but are moot in view of new ground(s) of rejection. Applicant is asked to please refer to the modified prior art rejection above where examiner addresses applicant's concerns regarding prior art rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X. Nguyen whose telephone number is (571) 272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor X Nguyen  
Examiner  
Art Unit 3731

Vn *VN*  
7/8/2005

*Julian W. Woo*

**JULIAN W. WOO  
PRIMARY EXAMINER**